Index to Volume 55, 1961

A

All-Sky Camera for Auroral Photography, An, *F. R. Park*, 203.

Arp, Halton C., Wilhelm Heinrich Walter Baade, 1893–1960, 113.

Astronomy in Canada, 86.

Atomic Energy of Canada Limited, Report, 86.

Auroral Photography, An All-Sky Camera for, *F. R. Park*, 203.

B

Baade, Wilhelm Heinrich Walter, 1893–1960, *Halton C. Arp*, 113.

Baadsgaard, H. (see R.A.S.C. Papers).

Balderston, Walter, Sir William Herschel and His Place in the History of Science, 1.

Batten, Alan H., Stellar Eclipses and Stellar Interiors, 120. (See also Review of Publications.)

Bayrock, L. A., R. E. Folinsbee and, The Bruderheim Meteorite—Fall and Recovery, 218. (See also R.A.S.C. Papers.)

Beals, C. S. (see R.A.S.C. Papers).

Bergh, Sidney van den, The Stellar Population of the Galactic Nucleus, 34. (See also Review of Publications.)

Bergh, Sidney van den and R. C. Henry, The Supernova in NGC 4564, 173.

Berkeley, California, August 15–24, 1961, Eleventh General Assembly of the International Astronomical Union, *K. O. Wright*, 241.

Brasch, Klaus R. (see R.A.S.C. Papers).

Bright-Line Stars of Class B, The, *Dean B. McLaughlin*, 13, 73.

Bruderheim Meteorite, The (R.A.S.C. Papers), *Earl R. Milton, H. Baadsgaard, R. E. Folinsbee* and *L. A. Bayrock*, 258.

Bruderheim Meteorite—Fall and Recovery, The, *R. E. Folinsbee* and *L. A. Bayrock*, 218.

Burland, Miriam S. (see Notes from Observatories).

C

Camera for Auroral Photography, An All-Sky, *F. R. Park*, 203.

Cameron, A. G. W. (see Astronomy in Canada).

Canadian Scientists Report, XXIV, *van den Bergh*, 34; XXV, Astronomy in Canada, 86; XXVI, *Batten*, 120.

Chromium Base Layer From an Optical Mirror, The Removal of a, *John F. Heard*, 112.

Coronae Borealis, R, 154428, 193.

Covington, Arthur E., Solar Emission at Ten Centimetre Wave-Length, 1947–1960, 167; A Zenith Telescope of Historical Interest, 251.

Cygni SS, 145.

Cygni W, 213244, 191.

Czarnec, Fred F., Charles H. Smiley and, The Paths of Solar Eclipses, 211.

D

Dalton, F. Keith, Tidal-Electric Power Generation, 23, 57; Tampering With the Tides, 176.

David Dunlap Observatory, The Removal of a Chromium Base Layer From an Optical Mirror, *John F. Heard*, 112; Notes, 48, 189.

Dominion Astrophysical Observatory, Notes, 90, 232.

Dominion Observatory, Notes, 141, 263.

Double Stars, An International Symposium on, *R. M. Petrie*, 248.

Douglas, A. E., Molecular Spectra in Astronomy and in the Laboratory (McKellar Memorial Lecture), 101.

Douglas, A. Vibert (see Review of Publications).

E

Eclipses and Stellar Interiors, Stellar, *Alan H. Batten*, 120.

Eclipses, The Paths of Solar, *Charles H. Smiley* and *Fred F. Czarnec*, 211.

Eleventh General Assembly of the

International Astronomical Union, Berkeley, California, August 15–24, 1961, *K. O. Wright*, 241.

F

Fitzgerald, D. J. (see R.A.S.C. Papers).
Folinsbee, R. E. and L. A. Bayrock, The Bruderheim Meteorite—Fall and Recovery, 218. (See also R.A.S.C. Papers.)

G

Gaizauskas, V. (see Review of Publications).
Galactic Nuclei (R.A.S.C. Papers), *Frank P. Morgan*, 262.
Galactic Nucleus, The Stellar Population of the, *Sidney van den Bergh*, 34.
Galactic Structure at Optical and Radio Wave-Lengths, *Maarten Schmidt*, 149.
Galt, John (see Review of Publications).
Geminorum, U, Variables, Notes on, 145.

H

Heard, John F., The Removal of a Chromium Base Layer From an Optical Mirror, 112; William Ross Hossack, 1927–1961, 201. (See also Notes from Observatories and Review of Publications.)
Henry, R. C., Sidney van den Bergh and, The Supernova in NGC 4564, 173.
Herschel, Sir William, and His Place in the History of Science, *Walter Balderston*, 1.
Hogg, Helen Sawyer (see Review of Publications).
Hossack, William Ross, 1927–1961, *John F. Heard*, 201.

I

I.G.C. Visual Meteor Programme—(1959) Progress Report No. 5, 137; (1960) Progress Report No. 6, 229.
Innes, M. J. S. (see R.A.S.C. Papers).
Inter-Centre Communication via Amateur Radio (R.A.S.C. Papers), *David Sands*, 256.
International Astronomical Union, Berkeley, California, August 15–24, 1961, Eleventh General Assembly of the, *K. O. Wright*, 241.
International Symposium on Double Stars, An, *R. M. Petrie*, 248.

J

Jones, Sir Harold Spencer, 1890–1960, *W. M. Smart*, 117.
Joy, A. H. (New Honorary Member, R.A.S.C.), 134.

L

Loehde, Franklin C. (see R.A.S.C. Papers).

M

Mayall, Margaret W. (see Variable Star Notes).
McClure, Alan (see Notes).
McLaughlin, Dean B., The Bright-Line Stars of Class B, 13, 73.
McLennan, Ian (see R.A.S.C. Papers).
McQuarrie, A. F. (see Notes).
Mediaeval Portable Sun-Dial, A, *Frederick A. Stebbins*, 49.
Meteor Magnitudes Observed in South Africa, 195.
Meteor News, 137, 195, 229, 265.
Meteor Programme, The I.G.C. Visual—Progress Report No. 5 (1959), 137; No. 6 (1960), 229.
Meteor Terminology, A Report on, 265.
Meteor Trail Effects on High-Frequency Radio Waves (R.A.S.C. Papers), *Bryan Rawlings*, 259.
Meteorite—Fall and Recovery, The Bruderheim, *R. E. Folinsbee* and *L. A. Bayrock*, 218.
Millman, Peter M. (see Meteor News).
Milton, Earl R. (see R.A.S.C. Papers).
Mirror, The Removal of a Chromium Base Layer From an Optical, *John F. Heard*, 112.
Molecular Spectra in Astronomy and in the Laboratory (McKellar Memorial Lecture), *A. E. Douglas*, 101.
Morgan, Frank P. (see R.A.S.C. Papers).

N

NGC 4564, The Supernova in, *Sidney van den Bergh* and *R. C. Henry*, 173.
Northcott, Ruth J. (see Notes and Review of Publications).
Notes, 94, 136, 235, 268.
Notes from Observatories, 48, 90, 141, 189, 232, 263.

O

Observations of Venus (R.A.S.C. Papers), *Klaus R. Brasch*, 254.

P

Park, F. R., An All-Sky Camera for Auroral Photography, 203.
Paths of Solar Eclipses, The, *Charles H. Smiley* and *Fred F. Czarnec*, 211.
Petrie, R. M., An International Symposium on Double Stars, 248.
Plinius—Details of an Investigation into the Nature of the Central Mass (R.A.S.C. Papers), *D. J. Fitzgerald*, 257.
Population of the Galactic Nucleus, The Stellar, *Sidney van den Bergh*, 34.
Power Generation, Tidal-Electric, *F. Keith Dalton*, 23, 57.
Profile of the Fossil Crater at Brent, Ontario (R.A.S.C. Papers) *M. J. S. Innes* and *C. S. Beals*, 258.

Q

Queen's Telescope, Dedication of the, 94.

R

Radio Wave-Lengths, Galactic Structure at Optical and, *Maarten Schmidt*, 149.
Rawlings, Bryan (see R.A.S.C. Papers).
Redman, R. O., Professor F. J. M. Stratton, F.R.S., 9.
Reeves, Hubert (see Astronomy in Canada).
Removal of a Chromium Base Layer From an Optical Mirror, The, *John F. Heard*, 112.
Restriction of Astronomical Observations by Space Objects, 95.
Review of Publications:
Baker Jr., R. M. L. and M. W. Makemson, An Introduction to Astrodynamics, *Alan H. Batten*, 276.
Beer, Arthur, editor, Vistas in Astronomy, volume III, *A. Vibert Douglas*, 45.
Bondi, H., Cosmology (second edition), *J. A. Rottenberg*, 92.
Carlos, E. S., tr., The Sidereal Messenger of Galileo Galilei, *John F. Heard*, 233.
D'Elia, Pasquale M., S.J., tr. by Rufus Sutor and Matthew Sciasia, Galileo in China, *John F. Heard*, 234.
Greenstein, Jesse L., editor, Stellar Atmospheres, *Anne B. Underhill*, 273.
Heinemann, K., F. Henn and W. Lohmann, editors, Astronomischer Jahresbericht, vol. 58, *Helen Sawyer Hogg*, 143.
Indian Ephemeris and Nautical Almanac for the Year 1962, *Ruth J. Northcott*, 276.
Jeffreys, Sir Harold, The Earth, Its Origin, History and Physical Constitution (fourth edition), *R. D. Russell*, 46.
Kuiper, Gerard P. and Barbara M. Middlehurst, editors, Telescopes, *V. Gaizauskas*, 275.
Naef, Robert A., editor, Der Sternenhimmel 1961, *Ruth J. Northcott*, 143.
Serviss, Garrett P., revised by Edwin E. Bridgen, Astronomy With an Opera Glass, *Ruth J. Northcott*, 277.
Shapley, Harlow, Galaxies (revised edition), *Sidney van den Bergh*, 274.
Shklovsky, I. S., Cosmic Radio Waves, *John Galt*, 91.
Tsiolkovsky, Konstantin, tr. by Kenneth Syers, Beyond the Planet Earth, *M. G. Whillans*, 144.
Role of a Planetarium in the Astronomical Society, The (R.A.S.C. Papers), *Ian McLennan*, 259.
Role of our Astronomical Society

in Today's Neighbourhood, The (R.A.S.C. Papers), *Franklin C. Loehde*, 256.
Rottenberg, J. A. (see Review of Publications).
Royal Astronomical Society of Canada, Annual Meeting: McKellar Memorial Lecture, 101; Minutes of Meeting, 132; Report of the Session for Papers, 133; New Honorary Members, 134; Service Award, 135; Amendments to Constitution and By-Laws, 135; National Officers and Council for 1961, 135; Report of the Victoria Centre, 136; (Note: other reports are printed in the Supplement); William Ross Hossack, 1927–1961, 201; Donation to Calgary Centre, 236; Papers, 254; General Assembly 1962, 268; Awards, 268.
Russell, R. D. (see Review of Publications).

S

Sands, David (see R.A.S.C. Papers).
Schmidt, Maarten, Galactic Structure at Optical and Radio Wave-Lengths, 149.
Shinn, B. F. (see Notes).
Smart, W. M., Sir Harold Spencer Jones, 1890–1960, 117.
Smiley, Charles H. and Fred F. Czarnec, The Paths of Solar Eclipses, 211.
Solar Eclipses, The Paths of, *Charles H. Smiley* and *Fred F. Czarnec*, 211.
Solar Emission at Ten Centimetre Wave-Length, 1947–1960, *Arthur E. Covington*, 167.
Spectra in Astronomy and in the Laboratory, Molecular (McKellar Memorial Lecture), *A. E. Douglas*, 101.
Stars of Class B, The Bright-Line, *Dean B. McLaughlin*, 13, 73.
Stebbins, Frederick A., A Mediaeval Portable Sun-Dial, 49.
Stellar Eclipses and Stellar Interiors, *Alan H. Batten*, 120.
Stellar Population of the Galactic Nucleus, The, *Sidney van den Bergh*, 34.
Stratton, Professor F. J. M., F.R.S., *R. O. Redman*, 9.
Sun-Dial, A Mediaeval Portable, *Frederick A. Stebbins*, 49.
Supernova in NGC 4564, The, *Sidney van den Bergh* and *R. C. Henry*, 173.
Supernovae, Table of, 239.

T

Tampering With the Tides, *F. Keith Dalton*, 176.
Telescope of Historical Interest, A Zenith, *Arthur E. Covington*, 251.
Tidal-Electric Power Generation, *F. Keith Dalton*, 23, 57.
Tides, Tampering With the, *F. Keith Dalton*, 176.

U

Underhill, Anne B. (see Review of Publications).
Université de Montréal, Report, 88.
Use of a Tape Recorder in Timing Astronomical Observations, The, 235.

V

Variable Star Notes, 41, 97, 145, 191, 237, 269.

W

Whillans, M. G. (see Review of Publications).
Wilhelm Heinrich Walter Baade, 1893-1960, *Halton C. Arp*, 113.
Woolley, R. v. d. R. (New Honorary Member, R.A.S.C.), 134.
Wright, K. O., Eleventh General Assembly of the International Astronomical Union, Berkeley, California, August 15–24, 1961, 241.

Z

Zenith Telescope of Historical Interest, A, *Arthur E. Covington*, 251.

THE JOURNAL OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

DEVOTED TO THE ADVANCEMENT OF ASTRONOMY AND ALLIED SCIENCES

Volume 55, 1961

PRINTED BY THE UNIVERSITY OF TORONTO PRESS

CONTENTS FOR VOLUME 55, 1961

I. FEBRUARY

Sir William Herschel and His Place in the History of Science.... *Walter Balderston* 1
Professor F. J. M. Stratton, F.R.S. ..... *R. O. Redman* 9
The Bright-Line Stars of Class B (*to be concluded*) ..... *Dean B. McLaughlin* 13
Tidal-Electric Power Generation (*to be concluded*) ..... *F. Keith Dalton* 23
Canadian Scientists Report—XXIV (The Stellar Population of the Galactic Nucleus: *Sidney van den Bergh*) 34
Variable Star Notes ..... *Margaret W. Mayall* 41
Review of Publications (*Vistas in Astronomy*, volume III edited by Arthur Beer; *The Earth, Its Origin, History and Physical Constitution* (fourth edition) by Sir Harold Jeffreys) 45
Notes From Observatories (David Dunlap Observatory) 48

II. APRIL

A Mediaeval Portable Sun-Dial ..... *Frederick A. Stebbins* 49
Tidal-Electric Power Generation (*concluded*) ..... *F. Keith Dalton* 57
The Bright-Line Stars of Class B (*concluded*) ..... *Dean B. McLaughlin* 73
Canadian Scientists Report—XXV (Astronomy in Canada) 86
Notes From Observatories (Dominion Astrophysical Observatory) 90
Review of Publications (*Cosmic Radio Waves* by I. S. Shklovsky; *Cosmology* (second edition) by H. Bondi) 91
Notes (Dedication of the Queen's Telescope; Restriction of Astronomical Observations by Space Objects) 94
Variable Star Notes ..... *Margaret W. Mayall* 97

III. JUNE

Molecular Spectra in Astronomy and in the Laboratory ..... *A. E. Douglas* 101
The Removal of a Chromium Base Layer From an Optical Mirror ..... *John F. Heard* 112
Wilhelm Heinrich Walter Baade, 1893–1960 ..... *Halton C. Arp* 113
Sir Harold Spencer Jones, 1890–1960 ..... *W. M. Smart* 117
Canadian Scientists Report—XXVI (Stellar Eclipses and Stellar Interiors: *Alan H. Batten*) 120
Annual Meeting of the R.A.S.C.: Minutes of Meeting; Report of the Session for Papers; New Honorary Members; Service Award; Amendments to Constitution and By-Laws; National Officers and Council for 1961 132
Notes (Report of the Victoria Centre) 136
Meteor News ..... *Peter M. Millman* 137

III. JUNE (*Continued*)

Notes From Observatories (Dominion Observatory) 141
Review of Publications (*Astronomischer Jahresbericht* edited by K. Heinemann, F. Henn, W. Lohmann; *Der Sternenhimmel 1961* edited by Robert A. Naef; *Beyond the Planet Earth* by Konstantin Tsiolkovsky, trans. by Kenneth Syers) 143
Variable Star Notes ..... *Margaret W. Mayall* 145

IV. AUGUST

Galactic Structure at Optical and Radio Wave-Lengths ..... *Maarten Schmidt* 149
Solar Emission at Ten Centimetre Wave-Length, 1947–1960 ..... *Arthur E. Covington* 167
The Supernova in NGC 4564 ..... *Sidney van den Bergh* and *R. C. Henry* 173
Tampering With the Tides ..... *F. Keith Dalton* 176
Notes From Observatories (David Dunlap Observatory) 189
Variable Star Notes ..... *Margaret W. Mayall* 191
Meteor News ..... *Peter M. Millman* 195

V. OCTOBER

William Ross Hossack, 1927–1961 ..... *John F. Heard* 201
An All-Sky Camera for Auroral Photography ..... *F. R. Park* 203
The Paths of Solar Eclipses ..... *Charles H. Smiley* and *Fred F. Czarnec* 211
The Bruderheim Meteorite—Fall and Recovery ..... *R. E. Folinsbee* and *L. A. Bayrock* 218
Meteor News ..... *Peter M. Millman* 229
Notes From Observatories (Dominion Astrophysical Observatory) 232
Review of Publications (*The Sidereal Messenger of Galileo Galilei* trans. by E. S. Carlos; *Galileo in China* by Pasquale M. D'Elia, S.J.) 233
Notes (The Use of a Tape Recorder in Timing Astronomical Observations; Donation to Calgary Centre) 235
Variable Star Notes ..... *Margaret W. Mayall* 237

VI. DECEMBER

Eleventh General Assembly of the International Astronomical Union, Berkeley, California, August 15–24, 1961 ..... *K. O. Wright* 241
An International Symposium on Double Stars ..... *R. M. Petrie* 248
A Zenith Telescope of Historical Interest ..... *Arthur E. Covington* 251
R.A.S.C. Papers 254
Notes From Observatories (Dominion Observatory) 263

VI. DECEMBER (*Continued*)

Meteor News ..... *Peter M. Millman* 265
Notes 268
Variable Star Notes ..... *Margaret W. Mayall* 269
Review of Publications (*Stellar Atmospheres* edited by Jesse L. Greenstein; *Galaxies* (revised edition) by Harlow Shapley; *Telescopes* edited by Gerard P. Kuiper and Barbara M. Middlehurst; *The Indian Ephemeris and Nautical Almanac for The Year 1962*; *An Introduction to Astrodynamics* by R. M. L. Baker Jr. and M. W. Makemson; *Astronomy with an Opera Glass* by Garrett P. Serviss, revised by Edwin E. Bridgen) 273
Index to Volume 55 279
Table of Contents for Volume 55 ..... i to v